

ABSTRACT

The semiconductor light-emitting element uses a compound semiconductor quantum well structure comprising a well layer, and barrier layers between which the well layer is sandwiched, as an active layer. In the adjacent well layer and barrier layers of the semiconductor light-emitting element, the well layer has in part a doped well region to which an n-type impurity is added at the interface with the barrier layer on the electron injection side, and in the vicinity of this interface, and the barrier layer has a doped barrier region to which the n-type impurity is added at least at the interface and in the vicinity of this interface.